

## STIC Biotechnology Systems Branch

### RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/549,796  
Source: PL/10  
Date Processed by STIC: 10/4/05

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.2.2 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail. Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom. Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05): U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street, Alexandria, VA 22314

Revised 01/24/05

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## Raw Sequence Listing Error Summary

### ERROR DETECTED

### SUGGESTED CORRECTION

SERIAL NUMBER: 10/549,796

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1      Wrapped Nucleics  
    Wrapped Aminos     The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
  
- 2      Invalid Line Length     The rules require that a line not exceed 72 characters in length. This includes white spaces.
  
- 3      Misaligned Amino  
    Numbering     The numbering under each 5<sup>th</sup> amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
  
- 4      Non-ASCII     The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
  
- 5      Variable Length     Sequence(s)      contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
  
- 6      PatentIn 2.0  
    "bug"     A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s)     . Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
  
- 7      Skipped Sequences  
    (OLD RULES)     Sequence(s)      missing. If intentional, please insert the following lines for each skipped sequence:  
                               (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  
                               (i)     SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)  
                               (xi) SEQUENCE DESCRIPTION: SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  
                               This sequence is intentionally skipped  
  
                               Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
  
- 8      Skipped Sequences  
    (NEW RULES)     Sequence(s)      missing. If intentional, please insert the following lines for each skipped sequence.  
                               <210> sequence id number  
                               <400> sequence id number  
                               000
  
- 9      Use of n's or Xaa's  
    (NEW RULES)     Use of n's and/or Xaa's have been detected in the Sequence Listing.  
                               Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.  
                               In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
  
- 10      Invalid <213>  
    Response     Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
  
- 11      Use of <220>  
    →     Sequence(s)      missing the <220> "Feature" and associated numeric identifiers and responses.  
                               Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.  
                               (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
  
- 12      PatentIn 2.0  
    "bug"     Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
  
- 13      Misuse of n/Xaa     "n" can only represent a single nucleotide; "Xaa" can only represent a single amino acid

AMC - Biotechnology Systems Branch - 09/09/2003

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PCT

## RAW SEQUENCE LISTING

DATE: 10/04/2005

PATENT APPLICATION: US/10/549,796

TIME: 10:16:05

Input Set : A:\12987\_54.txt

Output Set: N:\CRF4\10042005\J549796.raw

3 <110> APPLICANT: Enobia Pharma Inc.  
 4 Guy Boileau  
 5 Adriana Karaoglanovic Carmona  
 6 Marcelo Campos  
 7 Maria Aparecida Juliano  
 8 Luiz Juliano  
 10 <120> TITLE OF INVENTION: PHEX SUBSTRATES AND METHODS USING SAME.  
 11 <130> FILE REFERENCE: 12987.54  
 C--> 13 <140> CURRENT APPLICATION NUMBER: US/10/549,796  
 C--> 14 <141> CURRENT FILING DATE: 2005-09-19  
 16 <160> NUMBER OF SEQ ID NOS: 32  
 18 <170> SOFTWARE: PatentIn version 3.2  
 20 <210> SEQ ID NO: 1  
 21 <211> LENGTH: 7  
 22 <212> TYPE: PRT  
 23 <213> ORGANISM: Artificial  
 25 <220> FEATURE:  
 26 <223> OTHER INFORMATION: Peptide  
 28 <400> SEQUENCE: 1  
 30 Ala Trp Leu Asp Ser Gly Val  
 31 1 5  
 34 <210> SEQ ID NO: 2  
 35 <211> LENGTH: 4  
 36 <212> TYPE: PRT  
 37 <213> ORGANISM: Artificial  
 39 <220> FEATURE:  
 40 <223> OTHER INFORMATION: Peptide  
 42 <400> SEQUENCE: 2  
 44 Phe Ser Asp Tyr  
 45 1  
 48 <210> SEQ ID NO: 3  
 49 <211> LENGTH: 6  
 50 <212> TYPE: PRT  
 51 <213> ORGANISM: Artificial  
 53 <220> FEATURE:  
 54 <223> OTHER INFORMATION: peptide  
 56 <400> SEQUENCE: 3  
 58 Gly Phe Ser Asp Tyr Lys  
 59 1 5  
 62 <210> SEQ ID NO: 4  
 63 <211> LENGTH: 6  
 64 <212> TYPE: PRT  
 65 <213> ORGANISM: Artificial

*insufficient explanation  
 give source of  
 genetic material*

*Does Not Comply  
 corrected Diskette Needed*

*(see item 11 on Euro  
 summary sheet)*

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RAW SEQUENCE LISTING  
 PATENT APPLICATION: US/10/549,796

DATE: 10/04/2005  
 TIME: 10:16:05

Input Set : A:\12987\_54.txt  
 Output Set: N:\CRF4\10042005\J549796.raw

```

67 <220> FEATURE:
68 <223> OTHER INFORMATION: peptide
71 <220> FEATURE:
72 <221> NAME/KEY: misc_feature
73 <222> LOCATION: (2)..(5)
74 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid except cysteine
77 <400> SEQUENCE: 4
W--> 79 Gly Xaa Xaa Xaa Xaa Lys
      80 1 5
83 <210> SEQ ID NO: 5
84 <211> LENGTH: 6
85 <212> TYPE: PRT
86 <213> ORGANISM: Artificial
88 <220> FEATURE:
89 <223> OTHER INFORMATION: peptide
92 <220> FEATURE:
93 <221> NAME/KEY: MISC_FEATURE
94 <222> LOCATION: (2)..(3)
95 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid except
cysteine,
96 aspartate and glutamate
98 <220> FEATURE:
99 <221> NAME/KEY: MISC_FEATURE
100 <222> LOCATION: (5)..(5)
101 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid except
cysteine
103 <400> SEQUENCE: 5
W--> 105 Gly Xaa Xaa Asp Xaa Lys
      106 1 5
109 <210> SEQ ID NO: 6
110 <211> LENGTH: 6
111 <212> TYPE: PRT
112 <213> ORGANISM: Artificial
114 <220> FEATURE:
115 <223> OTHER INFORMATION: peptide
118 <220> FEATURE:
119 <221> NAME/KEY: MISC_FEATURE
120 <222> LOCATION: (2)..(2)
121 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid except
cysteine,
122 aspartate and glutamate
124 <220> FEATURE:
125 <221> NAME/KEY: MISC_FEATURE
126 <222> LOCATION: (3)..(3)
127 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid except
cysteine
129 <220> FEATURE:
130 <221> NAME/KEY: MISC_FEATURE
131 <222> LOCATION: (5)..(5)
132 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid except
cysteine,
133 aspartate and glutamate
135 <400> SEQUENCE: 6

```

W--> 137 Gly Xaa Xaa Asp Xaa Lys

RAW SEQUENCE LISTING  
 PATENT APPLICATION: US/10/549,796

DATE: 10/04/2005  
 TIME: 10:16:05

Input Set : A:\12987\_54.txt  
 Output Set: N:\CRF4\10042005\J549796.raw

```

138 1          5
141 <210> SEQ ID NO: 7
142 <211> LENGTH: 6
143 <212> TYPE: PRT
144 <213> ORGANISM: Artificial
146 <220> FEATURE:
147 <223> OTHER INFORMATION: peptide
150 <220> FEATURE:
151 <221> NAME/KEY: MISC_FEATURE
152 <222> LOCATION: (2)..(2)
153 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid except
cysteine
155 <220> FEATURE:
156 <221> NAME/KEY: MISC_FEATURE
157 <222> LOCATION: (3)..(3)
158 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid except
cysteine,
159      aspartate and glutamate
161 <220> FEATURE:
162 <221> NAME/KEY: MISC_FEATURE
163 <222> LOCATION: (5)..(5)
164 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid except
cysteine,
165      aspartate and glutamate
167 <400> SEQUENCE: 7
W--> 169 Gly Xaa Xaa Asp Xaa Lys
170 1          5
173 <210> SEQ ID NO: 8
174 <211> LENGTH: 4
175 <212> TYPE: PRT
176 <213> ORGANISM: Artificial
178 <220> FEATURE:
179 <223> OTHER INFORMATION: peptide
181 <400> SEQUENCE: 8
183 Asp Arg Arg Leu
184 1
187 <210> SEQ ID NO: 9
188 <211> LENGTH: 4
189 <212> TYPE: PRT
190 <213> ORGANISM: Artificial
192 <220> FEATURE:
193 <223> OTHER INFORMATION: peptide
195 <400> SEQUENCE: 9
197 Arg His Thr Arg
198 1
201 <210> SEQ ID NO: 10
202 <211> LENGTH: 6
203 <212> TYPE: PRT
204 <213> ORGANISM: Artificial
206 <220> FEATURE:
207 <223> OTHER INFORMATION: peptide
210 <220> FEATURE:

```

## RAW SEQUENCE LISTING

DATE: 10/04/2005

PATENT APPLICATION: US/10/549,796

TIME: 10:16:05

Input Set : A:\12987\_54.txt

Output Set: N:\CRF4\10042005\J549796.raw

211 <221> NAME/KEY: misc\_feature  
212 <222> LOCATION: (2)..(3)  
213 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid  
215 <220> FEATURE:  
216 <221> NAME/KEY: misc\_feature  
217 <222> LOCATION: (5)..(5)  
218 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid  
220 <400> SEQUENCE: 10  
W--> 222 Gly Xaa Xaa Asp Xaa Lys  
223 1 5  
226 <210> SEQ ID NO: 11  
227 <211> LENGTH: 6  
228 <212> TYPE: PRT  
229 <213> ORGANISM: Artificial  
231 <220> FEATURE:  
232 <223> OTHER INFORMATION: peptide  
235 <220> FEATURE:  
236 <221> NAME/KEY: misc\_feature  
237 <222> LOCATION: (2)..(3)  
238 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid  
240 <220> FEATURE:  
241 <221> NAME/KEY: misc\_feature  
242 <222> LOCATION: (5)..(5)  
243 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid  
245 <400> SEQUENCE: 11  
W--> 247 Gly Xaa Xaa Glu Xaa Lys  
248 1 5  
251 <210> SEQ ID NO: 12  
252 <211> LENGTH: 6  
253 <212> TYPE: PRT  
254 <213> ORGANISM: Artificial  
256 <220> FEATURE:  
257 <223> OTHER INFORMATION: peptide  
259 <400> SEQUENCE: 12  
261 Gly Phe Ser Glu Tyr Lys  
262 1 5  
265 <210> SEQ ID NO: 13  
266 <211> LENGTH: 6  
267 <212> TYPE: PRT  
268 <213> ORGANISM: Artificial  
270 <220> FEATURE:  
271 <223> OTHER INFORMATION: peptide  
273 <400> SEQUENCE: 13  
275 Gly Phe Ser Asp Tyr Gln  
276 1 5  
279 <210> SEQ ID NO: 14  
280 <211> LENGTH: 9  
281 <212> TYPE: PRT  
282 <213> ORGANISM: Artificial

RAW SEQUENCE LISTING  
 PATENT APPLICATION: US/10/549,796

DATE: 10/04/2005  
 TIME: 10:16:05

Input Set : A:\12987\_54.txt  
 Output Set: N:\CRF4\10042005\J549796.raw

284 <220> FEATURE:  
 285 <223> OTHER INFORMATION: peptide  
 287 <400> SEQUENCE: 14  
 289 Asp His Leu Ser Asp Thr Ser Thr Gln  
 290 1 5  
 293 <210> SEQ ID NO: 15  
 294 <211> LENGTH: 7  
 295 <212> TYPE: PRT  
 296 <213> ORGANISM: Artificial  
 298 <220> FEATURE:  
 299 <223> OTHER INFORMATION: peptide  
 301 <400> SEQUENCE: 15  
 303 Leu Glu Leu Asp Ser Arg Gln  
 304 1 5  
 307 <210> SEQ ID NO: 16  
 308 <211> LENGTH: 8  
 309 <212> TYPE: PRT  
 310 <213> ORGANISM: Artificial  
 312 <220> FEATURE:  
 313 <223> OTHER INFORMATION: peptide  
 315 <400> SEQUENCE: 16  
 317 Ala Trp Leu Asp Ser Gly Val Gln  
 318 1 5  
 321 <210> SEQ ID NO: 17  
 322 <211> LENGTH: 14  
 323 <212> TYPE: PRT  
 324 <213> ORGANISM: Artificial  
 326 <220> FEATURE:  
 327 <223> OTHER INFORMATION: peptide  
 329 <400> SEQUENCE: 17  
 331 Arg Arg His Thr Arg Ser Ala Glu Asp Asp Ser Glu Arg Gln  
 332 1 5 10  
 335 <210> SEQ ID NO: 18  
 336 <211> LENGTH: 8  
 337 <212> TYPE: PRT  
 338 <213> ORGANISM: Artificial  
 340 <220> FEATURE:  
 341 <223> OTHER INFORMATION: peptide  
 343 <400> SEQUENCE: 18  
 345 Leu Met Met Asp Phe Arg Gly Gln  
 346 1 5  
 349 <210> SEQ ID NO: 19  
 350 <211> LENGTH: 8  
 351 <212> TYPE: PRT  
 352 <213> ORGANISM: Artificial  
 354 <220> FEATURE:  
 355 <223> OTHER INFORMATION: peptide  
 357 <400> SEQUENCE: 19  
 359 Ser Ala Glu Asp Asn Ser Pro Gln

*PYI*

→ The types of errors shown exist throughout the Sequence Listing. Please check subsequent sequences for similar errors.

*global error*



RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/10/549,796

DATE: 10/04/2005  
TIME: 10:16:06

Input Set : A:\12987\_54.txt  
Output Set: N:\CRF4\10042005\J549796.raw

**Please Note:**

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:4; Xaa Pos. 2,3,4,5  
Seq#:5; Xaa Pos. 2,3,5  
Seq#:6; Xaa Pos. 2,3,5  
Seq#:7; Xaa Pos. 2,3,5  
Seq#:10; Xaa Pos. 2,3,5  
Seq#:11; Xaa Pos. 2,3,8

**Invalid <213> Response:**

Use of "Artificial" only as "<213> Organism" response is incomplete,  
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27  
Seq#:28,29,30,31,32

## VERIFICATION SUMMARY

DATE: 10/04/2005

PATENT APPLICATION: US/10/549,796

TIME: 10:16:06

Input Set : A:\12987\_54.txt

Output Set: N:\CRF4\10042005\J549796.raw

L:13 M:270 C: Current Application Number differs, Replaced Current Application Number  
L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
L:79 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0  
L:105 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0  
L:137 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0  
L:169 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0  
L:222 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:0  
L:247 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:0